(b) detecting the amount of said heterologous polypeptide in said biological fluid, thereby providing an indication of the amount of said gene expression.

28. The method of claim 27, wherein said heterologous polypeptide is biologically inactive in said organism.

29. The method of claim 27, wherein the molecular weight of said heterologous polypeptide is below 10 kilodaltons.

30. The method of claim 27, wherein said heterologous polypeptide is a tumor antigen.

31. The method of claim 27, wherein said heterologous polypeptide is a carcinoembryonic antigen.

32. The method of claim 27, wherein said heterologous polypeptide is a beta subunit of human chorionic gonadotrophin.

a24 Cont

33. The method of claim 27, wherein said nucleic acid sequence encodes a fusion protein, wherein said fusion protein comprises said heterologous polypeptide fused to an endogenous polypeptide.

34. The method of claim 33, wherein said endogenous polypeptide is an H protein.

35. The method of claim 33, wherein said fusion protein comprises an amino acid linker sequence between said heterologous polypeptide and said endogenous polypeptide, and wherein said amino acid linker sequence comprises a protease cleavage site.

36. The method of claim 35, wherein said protease cleavage site is a furin cleavage site.

37. The method of claim 27, wherein said Paramyxoviridae virus is replication-competent.

38. The method of claim 27, wherein said Paramyxoviridae virus is selected from the group consisting of Paramyxovirus, Morbillivirus, Rubulavirus, and Pneumovirus.

39. The method of claim 27, wherein said Paramyxoviridae virus is selected from the group consisting of mumps virus, parainfluenza virus type I, parainfluenza virus type III, and Sendai virus.

40. The method of claim 27, wherein said Paramyxoviridae virus is selected from the group consisting of measles virus, rinderpest virus, phocine distemper virus, and canine distemper virus.

41. The method of claim 27, wherein said Paramyxoviridae virus is selected from the group consisting of human respiratory syncytial virus and bovine respiratory syncytial virus.

42. The method of claim 27, wherein said Paramyxoviridae virus is selected from the group consisting of Simian virus type V and Newcastle disease virus.

a24 Cont

43. A Paramyxoviridae virus comprising a nucleic acid sequence encoding a heterologous polypeptide, wherein said Paramyxoviridae virus infects cells of an organism when administered to said organism, and wherein said heterologous polypeptide is released from said infected cells into a biological fluid of said organism when expressed, said released heterologous polypeptide being detectable in said biological fluid.

44. The Paramyxoviridae virus of claim 43, wherein said heterologous polypeptide is biologically inactive in said organism.

45. The Paramyxoviridae virus of claim 43, wherein the molecular weight of said heterologous polypeptide is below 10 kilodaltons.

46. The Paramyxoviridae virus of claim 43, wherein said heterologous polypeptide is a tumor antigen.

47. The Paramyxoviridae virus of claim 43, wherein said heterologous polypeptide is a carcinoembryonic antigen.

48. The Paramyxoviridae virus of claim 43, wherein said heterologous polypeptide is a beta subunit of human chorionic gonadotrophin.

49. The Paramyxoviridae virus of claim 43, wherein said nucleic acid sequence encodes a fusion protein, wherein said fusion protein comprises said heterologous polypeptide fused to an endogenous polypeptide.

50. The Paramyxoviridae virus of claim 49, wherein said endogenous polypeptide is an H protein.

a24 Cont

51. The Paramyxoviridae virus of claim 49, wherein said fusion protein comprises an amino acid linker sequence between said heterologous polypeptide and said endogenous polypeptide, and wherein said amino acid linker sequence comprises a protease cleavage site.

52. The Paramyxoviridae virus of claim 51, wherein said protease cleavage site is a furin cleavage site.

53. The Paramyxoviridae virus of claim 43, wherein said Paramyxoviridae virus is replication-competent.

54. The Paramyxoviridae virus of claim 43, wherein said Paramyxoviridae virus is selected from the group consisting of Paramyxovirus, Morbillivirus, Rubulavirus, and Pneumovirus.

55. The Paramyxoviridae virus of claim 43, wherein said Paramyxoviridae virus is selected from the group consisting of mumps virus, parainfluenza virus type I, parainfluenza virus type III, and Sendai virus.

56. The Paramyxoviridae virus of claim 43, wherein said Paramyxoviridae virus is selected from the group consisting of measles virus, rinderpest virus, phocine distemper virus, and canine distemper virus.

C24 Cancel

57. The Paramyxoviridae virus of claim 43, wherein said Paramyxoviridae virus is selected from the group consisting of human respiratory syncytial virus and bovine respiratory syncytial virus.

58. The Paramyxoviridae virus of claim 43, wherein said Paramyxoviridae virus is selected from the group consisting of Simian virus type V and Newcastle disease virus.--